

I. Amendments to the Claims

This listing of claims replaces without prejudice all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) An image processing system for processing video content in a sequence of video frames and linking a one or more pixel object ~~objects~~ embedded in said video content to ~~selected data~~ corresponding to the pixel object ~~objects in a sequence of video frames~~, the image processing system comprising:

a video capture system for capturing a frame of said sequence of video frames ~~to be viewed defining a captured video frame~~;

a user interface for enabling a user to select the one or more pixel object ~~objects~~ in said captured frame ~~defining selected pixel objects~~;

a video linking system which generates a one or more linked video file that is files, ~~separate from and not embedded in said video content~~, said linked video file comprising (i) a pixel object file ~~files~~ identifying the selected pixel object ~~objects~~ by frame number and location within the captured video

frame and at least one subsequent video frame, and (ii) a separate data object file that includes information related to the object that corresponds to the selected pixel object, the data object file being linked to the corresponding pixel object ~~file provide one or more links to predetermined data objects for each pixel object,~~ wherein said linked video file is ~~files are~~ configured to be exportable to a media player so that a selected location ~~locations~~ in said sequence of video frames selected by a pointing device during playback of the video frames can be linked with the data object ~~objects~~ when said selected location ~~corresponds~~ ~~locations correspond~~ to the selected pixel object ~~said pixel objects;~~ and

wherein said video linking system samples said video content at a sample rate which is a divisor ~~multiple~~ of plural standard playback rates.

2. (Currently Amended) The system as recited in claim 1, wherein said video linking system samples said video content at a sample rate of a divisor ~~multiple~~ of 30 frames per second and 12 frames per second.

3. (Previously Presented) The system as recited in claim 2, wherein said sample rate is at least 3 frames per second.

4. (Original) The system as recited in claim 1, wherein said video linking system is configured to identify segment breaks in said video content.

5. (Original). The system as recited in claim 4, wherein said segment breaks are determined by determining the median average pixel values for a series of frames and comparing changes in the pixel values relative to the median average and indicating a segment break when the change in pixel values represents at least a predetermined change relative to the median average.

Claims 6-10. (Cancelled)

11. (Currently Amended) The image processing system as recited in claim 1, further including a video playback application for playing back video content and said linked video file files, wherein said video playback application is configured to (i) determine if locations selected by a pointing device during playback of the video content correspond to said selected pixel object ~~predetermined pixel objects~~ and (ii) provide a link to a corresponding data object when said selected

location corresponds to one of said selected pixel object
~~predetermined pixel objects~~.

Claim 12. (Cancelled)

13. (Currently Amended) The system as recited in claim 1, wherein said video linking system samples said video content at a sample rate of a divisor ~~multiple~~ of NTSC and PAL frame rates.

14. (Currently Amended) The system as recited in claim 1, wherein said video linking system samples said video content at a sample rate of a divisor ~~multiple~~ of NTSC and 12 FPS frame rates.

15. (Currently Amended) The system as recited in claim 1, wherein said video linking system samples said video content at a sample rate of a divisor ~~multiple~~ of NTSC, PAL, 15 FPS, and 12 FPS frame rates.

16. (Currently Amended) The system as recited in claim 1, wherein said video linking system samples said video content at a sample rate of a divisor ~~multiple~~ of NTSC and movie frame rates.

17. (Previously Presented) The system as recited in claim 1, wherein said video linking system clusters the sampled video content with plural frames per cluster.

18. (Currently Amended) The system as recited in claim 1, further comprising a pixel object tracking system which includes a processor which automatically tracks the said selected pixel object ~~objects~~ in other frames, said pixel object tracking system including a system for automatically determining changes in the characteristics of said ~~one or more~~ pixel object ~~objects~~ based upon changes in lighting and automatically compensating based upon those changes.

19. (Currently Amended) An image processing system for processing video content in a sequence of video frames and linking a ~~one or more~~ pixel object ~~objects~~ embedded in said video content to ~~selected~~ data corresponding to the pixel object ~~objects in a sequence of video frames~~, the image processing system comprising:

a video capture system for capturing a sequence of video frames;

a user interface for enabling a user to select a pixel object in at least one of the captured frames;

a video linking system which generates a linked video file that is ~~7~~ separate from and not embedded in said video content, said linked video file comprising (i) a pixel object file which identifies, by frame number and location within the frame, the selected pixel object in the ~~at least one~~ captured frame and at least one subsequent frame, and (ii) a separate data object file which includes data that corresponds to links the selected pixel object ~~to a predetermined data object~~, said linked video file being configured to be exportable to a media player, said video linking system sampling said video content at a sample rate which is a divisor ~~multiple~~ of plural standard playback rates.

20. (Currently Amended) The system as recited in claim 19, wherein said video linking system samples said video content at a sample rate of a divisor ~~multiple~~ of 30 frames per second and 12 frames per second.

21. (Previously Presented) The system as recited in claim 19, wherein said sample rate is at least 3 frames per second.

22. (Currently Amended) The image processing system as recited in claim 19, further including a video playback

application for playing back video content and said linked video file files, wherein said video playback application is configured to (i) determine if a location ~~locations~~ selected by a pointing device during playback of the video content corresponds ~~correspond~~ to ~~said-predetermined~~ the selected pixel object ~~objects~~ and (ii) provide a link to a data object in the data object file when said selected location corresponds to ~~one~~ of the selected pixel object ~~objects~~.

23. (Currently Amended) The system as recited in claim 19, wherein said video linking system samples said video content at a sample rate of a divisor ~~multiple~~ of NTSC and PAL frame rates.

24. (Currently Amended) The system as recited in claim 19, wherein said video linking system samples said video content at a sample rate of a divisor ~~multiple~~ of NTSC and 12 FPS frame rates.

25. (Currently Amended) The system as recited in claim 19, wherein said video linking system samples said video content at a sample rate of a divisor ~~multiple~~ of NTSC, PAL, 15 FPS, and 12 FPS frame rates.

26. (Currently Amended) The system as recited in claim 19, wherein said video linking system samples said video content at a sample rate of a divisor ~~multiple~~ of NTSC and movie frame rates.

27. (Previously Presented) The system as recited in claim 19, wherein said video linking system clusters the sampled video content with plural frames per cluster.

28. (Currently Amended) The system as recited in claim 19, further comprising a pixel object tracking system which includes a processor which automatically tracks said selected pixel object ~~objects~~ in other frames, said pixel object tracking system including a system for automatically determining changes in the characteristics of said selected ~~one or more~~ pixel object ~~objects~~ based upon changes in lighting and automatically compensating based upon those changes.

29. (Currently Amended) An image processing system for processing video content in a sequence of video frames and linking a ~~one or more~~ pixel object ~~objects~~ embedded in said video content to corresponding ~~selected data objects in a~~ ~~sequence of video frames~~, the image processing system comprising:

a video capture system for capturing a sequence of video frames;

a user interface for enabling a user to select a pixel object in at least one of the captured frames;

a video linking system which generates a linked video file that is γ separate from and not embedded in said video content, said linked video file comprising (i) a pixel object file which identifies, by frame number and location within the frame, the selected pixel object in the at least one captured frame and at least one subsequent frame, and (ii) a separate data object file, linked to the pixel object file, which includes data corresponding to the selected pixel object links ~~the selected pixel object to a predetermined data object~~, said video linking system being configured to be exportable to a media player, said video linking system sampling said video content at a sample rate which is a divisor multiple of plural standard playback rates, said video linking system clustering the sampled video content with plural frames per cluster.